

10/561,838

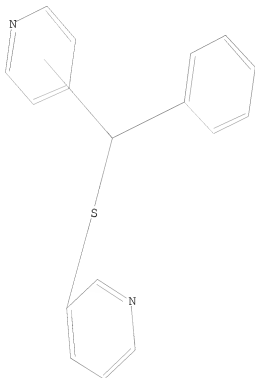
>
Uploading C:\Program Files\Stnexp\Queries\10561838i.str

L1 STRUCTURE UPLOADED

=> d

L1 HAS NO ANSWERS

L1 STR



G1 C,N

Structure attributes must be viewed using STN Express query preparation.

=> s l1 sss full

THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 191.05 U.S. DOLLARS

DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N or END:y

FULL SEARCH INITIATED 12:58:11 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 1365 TO ITERATE

100.0% PROCESSED 1365 ITERATIONS

32 ANSWERS

SEARCH TIME: 00.00.01

L2 32 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE
ENTRY

TOTAL
SESSION

T0h

18/11/2010

FULL ESTIMATED COST

191.54

191.76

FILE 'CAPLUS' ENTERED AT 12:58:19 ON 18 NOV 2010
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2010 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 18 Nov 2010 VOL 153 ISS 21
FILE LAST UPDATED: 17 Nov 2010 (20101117/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Aug 2010
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Aug 2010

CAPLUS now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2010.

CAS Information Use Policies apply and are available at:

<http://www.cas.org/legal/infopolicy.html>

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l2 and py<2004
4 L2
24051963 PY<2004
L3 1 L2 AND PY<2004

=> d l ibib abs hitstr
THE ESTIMATED COST FOR THIS REQUEST IS 5.81 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:y

L3 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2010 ACS ON STN

ACCESSION NUMBER:	2003:532638 CAPLUS
DOCUMENT NUMBER:	139:101146
TITLE:	Preparation of benzyl or heterocyclylmethyl phenyl or heterocyclyl sulfones as β -amyloid protein production/secretion inhibitors
INVENTOR(S):	Yasukochi, Takanori; Ito, Masayuki; Kubota, Hideki; Miyauchi, Satoshi; Saito, Masaki
PATENT ASSIGNEE(S):	Daiichi Pharmaceutical Co., Ltd., Japan
SOURCE:	PCT Int. Appl., 540 pp. CODEN: PIXXD2
DOCUMENT TYPE:	Patent
LANGUAGE:	Japanese
FAMILY ACC. NUM. COUNT:	1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003055850	A1	20030710	WO 2002-JP13792	20021227 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2471943	A1	20030710	CA 2002-2471943	20021227 <--
AU 2002367147	A1	20030715	AU 2002-367147	20021227 <--
EP 1466898	A1	20041013	EP 2002-790937	20021227
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
CN 1585746	A	20050223	CN 2002-827790	20021227
CN 100562516	C	20091125		
RU 2304140	C2	20070810	RU 2004-122915	20021227
JP 4329905	B2	20090909	JP 2003-556382	20021227
KR 927304	B1	20091118	KR 2004-7009960	20021227
US 20050234109	A1	20051020	US 2004-500156	20040625
US 7399775	B2	20080715		
HK 1071354	A1	20100827	HK 2005-104085	20050517
US 20070293495	A1	20071220	US 2007-829533	20070727
PRIORITY APPLN. INFO.:			JP 2001-395701	A 20011227
			WO 2002-JP13792	W 20021227
			US 2004-500156	A3 20040625

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 139:101146

AB Novel compds. having various substituents as represented by the following general formula R1(R2)(R3)C-X-R4, salts thereof, and solvates of the same [wherein X = S, SO, SO2; R1 = CR5R6R7, NR8R9, X1R10, X2R11; wherein R5, R6, R7 = halo, cyano, NO2, -Q51-Q52-Q53-Q54; Q51, Q53 = single bond, CO, S(O), SO2, COCO, COC(S), C(S)C(S); Q52 = single bond, O, ON(A51), ON(COA51), N(A51), N(COA51), N(CO2A51), N(CON(A51)(A52)), N(OA51), N(NA51A52), N(A51)N(A52), N(COA51)N(A52), N(A51)-O, N(COA51)-O, S, N:N, C(A51):N, C(A51):N-O, C(A51):N-N(A52), N:C(A51), O-N:C(A51), N(A51)-N:C(A52), C(:NA51)-N(A52); Q54 = A53, OA53, N(A53)(A54), SA53, NA54-OA53, NA55-N(A53)(A54), O-N(A53)(A54); wherein A51, A52, A53 = H, (un)substituted hydrocarbyl or heterocyclyl; R2, R3, R4, R8, R9, R10, R11 = -Q51-Q52-Q53-Q54 defined in R5-R7; X1 = O, S; X2 = SO, SO2; or R1 and R2 or R3 and R4 are combined together to form (un)substituted cyclohydrocarbyl or heterocyclyl] are prepared. These compds. have an effect of inhibiting the production/secretion of a β -amyloid protein and are useful for the prevention or treatment of diseases caused by unusual production/secretion of β -amyloid, in particular Alzheimer's disease or Down's syndrome. Thus, a solution of 100 mg 2,5-dichloro-4-[(4-chlorophenylthio)-(2,5-difluorophenyl)methyl]pyridine (preparation given) and 200 μ L morpholine in 1.0 mL 1,4-dioxane was stirred at 100° for 2 days to give 4-[5-chloro-4-[(4-chlorophenylthio)-(2,5-difluorophenyl)methyl]pyridin-2-yl]morpholine which (90 mg) was dissolved

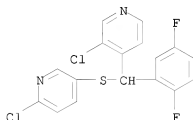
in 12 mL MeOH, treated with 60 mg ammonium molybdate tetrahydrate [(NH₄)₆Mo₇O₂₄·4H₂O] and 6 mL 30% H₂O₂, and stirred for 8 h to give 83% 4-[5-chloro-4-[(4-chlorophenylsulfonyl)-(2,5-difluorophenyl)methyl]pyridin-2-yl]morpholine (I). I in vitro glioma cell (H4 cell) expressing human β -amyloid protein precursor protein gene (APP751 gene) with EC₅₀ of ≤ 50 nM.

IT 558465-25-1P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of benzyl or heterocyclylmethyl Ph or heterocyclyl sulfones as β -amyloid protein production/secretion inhibitors for treatment or preparation of Alzheimer's disease or Down's syndrome)

RN 558465-25-1 CAPLUS

CN Pyridine, 2-chloro-5-[[3-chloro-4-pyridinyl](2,5-difluorophenyl)methyl]thio]- (CA INDEX NAME)

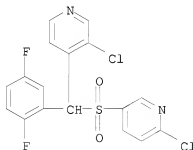


IT 558465-26-2P 558465-27-3P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of benzyl or heterocyclylmethyl Ph or heterocyclyl sulfones as β -amyloid protein production/secretion inhibitors for treatment or preparation of Alzheimer's disease or Down's syndrome)

RN 558465-26-2 CAPLUS

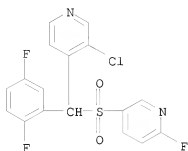
CN Pyridine, 2-chloro-5-[[3-chloro-4-pyridinyl](2,5-difluorophenyl)methyl]sulfonyl]- (CA INDEX NAME)



RN 558465-27-3 CAPLUS

CN Pyridine, 5-[[3-chloro-4-pyridinyl](2,5-difluorophenyl)methyl]sulfonyl]-2-fluoro- (CA INDEX NAME)

10/923,271



OS.CITING REF COUNT: 6

THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD
(12 CITINGS)

REFERENCE COUNT: 41

THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=>